

Notice of Allowability

Application No.

10/748,091

Examiner

Kamran Afshar, 571-272-7796

Applicant(s)

HIRSBRUNNER ET AL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/17/2005.
2. ☒ The allowed claim(s) is/are 1,3-12,14-25 and 27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Jeffrey K. Jacobs Reg. No: 44,798 on 10/20/2005.

The application has been amended as follows:

In The Claims:

1. (amended) A wireless communication unit comprising:
 - a transceiver suitable to support an air interface with a first wireless communication network and with a second wireless communication network;
 - a user interface operable to initiate a call to a number of a target unit; and
 - a controller, coupled to the transceiver and the user interface, and operable, responsive to the call initiation and when the wireless communication unit is operating in the second wireless communication network, to selectively hairpin the call through the first communication network, wherein the controller, to selectively hairpin, is:
 - further operable to determine when the call is likely to be handed into the first communication network; and
 - further operable, if the call is likely to be handed into the first communication network, to hairpin the call through the first communication network.
2. (canceled)
3. (amended) The wireless communication unit of claim ~~2~~ 1 wherein the controller, to hairpin the call through the first communication network, is further operable

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with the transceiver to call a hairpin number terminating at the first communication network and transfer information corresponding to the number of the target unit to the first communication network.

4. (original) The wireless communication unit of claim 3 wherein the hairpin number is one of: a toll free number, stored in a memory associated with the controller, received from the first communication network, and a number that terminates on a proximate communication network.
5. (original) The wireless communication unit of claim 3 wherein the controller is further operable to call the hairpin number and transfer the information in a manner that is transparent to a user of the wireless communication unit.
6. (currently amended) The wireless communication unit of claim 2 1 wherein the controller, to determine when the call is likely to be handed into the first communication network, is further operable to determine one of a location of the wireless communication unit and availability of the first communication network.
7. (original) The wireless communication unit of claim 6 wherein the controller is further operable to compare the location of the wireless communication unit to location information corresponding to the first communication network and when the comparison is favorable to scan for the first communication network.
8. (original) The wireless communication unit of claim 7 wherein the controller, to scan for the first communication network, is further operable to aggressively scan for the first communication network only when one of: the wireless communication unit is engaged in the call; the controller determines that the call may be initiated; and the

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controller determines that its location is compares favorably to the location information corresponding to the first communication network.

9. (original) The wireless communication unit of claim 6 wherein the controller, to determine the location of the wireless communication unit, is further operable to determine one of geographical location information and information corresponding to the second communication network.

10. (original) The wireless communication unit of claim 6 wherein the controller, to determine availability of the first communication network, is further operable to learn location information corresponding to the first communication network.

11. (original) The wireless communication unit of claim 1 wherein the second communication network is a wide area network, the first communication network is a wireless local area network, and the number of the target unit corresponds to a number other than a number terminating at the first communication network.

12. (amended) A method in a wireless communication unit of selectively routing a call that is being originated, the method comprising:

- initiating a call to a number of a target unit; and
- automatically selectively hairpinning the call through a first communication network when the call is being originated in a second communication network and the call is terminating at the second communication network; and
- determining when the call is likely to be handed into the first communication network and selectively hairpinning the call through the first communication network when the call is likely to be handed into the first communication network.

13. (canceled)

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14. (original) The method of claim 12 wherein the automatically selectively hairpinning the call further comprises calling a hairpin number terminating at the first communication network and transferring information corresponding to the number of the target unit to the first communication network.

15. (original) The method of claim 14 wherein the hairpin number is one of: a toll free number, stored in a memory associated with the controller, received from the first communication network, and a number that terminates on a proximate communication network.

16. (original) The method of claim 14 wherein the calling the hairpin number and the transferring the information is performed in a manner that is transparent to a user of the wireless communication unit.

17. (amended) The method of claim ~~43~~ 12 wherein the determining when the call is likely to be handed into the first communication network further comprises determining one of a location of the wireless communication unit and availability of the first communication network.

18. (original) The method of claim 17 further comprising comparing the location of the wireless communication unit to location information corresponding to the first communication network and when the comparison is favorable scanning for the first communication network.

19. (original) The method of claim 18 wherein the scanning for the first communication network further comprises aggressively scanning for the first

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communication network only when one of: the wireless communication unit is engaged in the call on the second communication network; and the call may be initiated.

20. (original) The method of claim 17 wherein the determining the location of the wireless communication unit further comprises determining one of geographical location information for the wireless communication unit and information corresponding to the second communication network.

21. (original) The method of claim 17 wherein the determining availability of the first communication network further comprises learning location information corresponding to the first communication network.

22. (original) The method of claim 12 wherein the second communication network is a wide area network, the first communication network is a wireless local area network, the wireless communication unit is operable in the first and the second communication network, and the number of the target unit corresponds to a number other than a number terminating at the first communication network.

23. (original) The method of claim 12 further comprising one of:
determining when the call is a long distance call and selectively hairpinning the call through the first communication network when the call is a long distance call' and
determining when the call is a business related call and selectively hairpinning the call through the first communication network when the call is a business related call.

24. (amended) A network controller operable to facilitate hairpinning calls from a wireless communication unit, the network controller comprising:
a switching function coupled to a local area network and a public switched telephone system; and

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a call controller, coupled to the switching function and comprising an associated memory, operable to provide hairpin information to the wireless communication unit, wherein the hairpin information comprises one of: a hairpin number; and information for use by the wireless communication unit in determining whether a call to be initiated by the wireless communication unit should be hairpinned.

25. (original) The network controller of claim 24 wherein the controller provides the hairpin information to the wireless communication unit when one of: the wireless communication unit requests the hairpin information; and when the wireless communication unit is associated with the local area network.

26. (canceled)

27. (amended) The network controller of claim ~~26~~ 24 wherein the information for use in determining whether the call to be initiated by the wireless communication unit should be hairpinned further comprises one of: geographic location information corresponding to the local area network; and network information corresponding to another communication network.

Allowable Subject Matter

2. Claims 1, 3-12, 14-25 and 27 are allowed.

The following is an examiner's statement of reasons for allowance: 1, 3-12, 14-25 and 27.

With respect to claim 1, the prior art of record fails to disclose or render obvious that the controller, coupled to the transceiver and the user interface, and operable, responsive to the call initiation and when the wireless communication unit is operating in the second wireless communication network, to selectively hairpin the call through the first communication network, wherein the controller, to selectively hairpin, is: further operable to determine when the call is

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likely to be handed into the first communication network; and further operable, if the call is likely to be handed into the first communication network, to hairpin the call through the first communication network.

With respect to claim 12, the prior art of record fails to disclose or render obvious that automatically selectively hairpinning the call through a first communication network when the call is being originated in a second communication network and the call is terminating at the second communication network; and determining when the call is likely to be handed into the first communication network and selectively hairpinning the call through the first communication network when the call is likely to be handed into the first communication network.

With respect to claim 24, the prior art of record fails to disclose or render obvious that the network controller comprising: a switching function coupled to a local area network and a public switched telephone system; and call controller, coupled to the switching function and comprising an associated memory, operable to provide hairpin information to the wireless communication unit, wherein the hairpin information comprises one of: a hairpin number; and information for use by the wireless communication unit in determining whether a call to be initiated by the wireless communication unit should be hairpinned.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Bunting (U.S. 6,393,289 B1), which discloses Apparatus, method and system for wireless telecommunication session control by an adjunct network.

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b) Calabrese (U. S. 6,389,279 B1), which discloses Method and apparatus providing call redirection for subsequent call events in a telephone communication system.

c) Batni (U.S. Pub. No.: 2005/0078812 A1), which discloses Feedback to calling communication device on call connected with intelligent network signaling.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, **Feild, Joseph** can be reached @ (571) 272-4090. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kamran Afshar


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER